

Amendments to the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any cancelled claims at a later date.

1.-12. (canceled)

13. (new) An automation system for connecting to a field device, comprising:  
a plurality of connectors for connecting to the field device,  
an excitation component for providing a signal to the field device, the excitation component having a terminal;  
a measurement component for measuring a response from the field device, the measurement component having a terminal; and  
a connection unit for selective connection each of the plurality of connectors to a terminal selected from group consisting of the excitation terminal and measurement terminal.

14. (new) The automation system as claimed in claim 13, wherein the connection unit is a switch matrix.

15. (new) The automation system as claimed in claim 14, further comprising a control unit for controlling the switch matrix.

16. (new) The automation system as claimed in claim 15, wherein the switch matrix and the control unit are designed as elements of an integrated circuit.

17. (new) A method for identifying connection errors in a field device connected to an automation system, comprising:

supplying a signal to the field device via an excitation component;  
determining a measurement variable assigned to the field device via a measurement component;  
analyzing the measurement variable via an analysis unit; and  
selecting connection combinations for a plurality of connectors of the field device, at least of a portion of the connectors connected each connected to and a terminal selected from the

group consisting of a terminal of the excitation component and a terminal of the measurement component.

18. (new) The method as claimed in claim 17, wherein the connection unit is controlled by a control unit.

19. (new) The method as claimed in claim 17, further comprises: repeating the process of supplying, determining and selecting, wherein the subsequent selecting uses a different connection combinations.

20. (new) The method as claimed in claim 19, wherein the repetition or the selection of the used terminals depends on the result of the analysis of an earlier measurement.

21. (new) The method as claimed in claim 20, wherein the connection unit is controlled by a control unit.

22. (new) A method for correcting connection errors in a field device connected to an automation system, comprising:

providing an excitation component for supplying a signal to the field device;  
providing a measurement component for determining a measurement variable assigned;  
identifying a connection error; and  
correcting the connection error via a connection unit for selective connection of field-device connectors and terminals, each terminal selected from the group consisting of a terminal of the excitation component and a terminal of the measurement component.

23. (new) The method as claimed in claim 22, wherein the connection unit is controlled by a control unit.

24. (new) The method as claimed in claim 22, wherein correction of the connection error includes adapting the connection unit to suit the field-device type.

25. The method as claimed in claim 24, wherein correcting the connection error comprises comparing with a known configuration between the field device and the automation system and appropriate adjustment of the connection unit.

26. (new) A connection unit for selectively connecting lines of a field-device of an automation system to lines of an excitation component or measurement component of the automation system.